

a<sup>1</sup> virus type 1 (HIV-1) protein, wherein said bacterial host can induce anti-HIV-1 immune responses.

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Please amend claim 2 as follows:

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a<sup>2</sup> 2. (amended) The [vaccine] attenuated bacterial host of claim 1, wherein said gene required for surface exposure encodes *E. coli* lipoprotein signal sequence linked to a portion of the *E. coli* outer membrane protein ompA.

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Please amend claim 3 as follows:

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a<sup>3</sup> 3. (amended) The [vaccine] attenuated bacterial host of claim 1, wherein said gene encoding a human immunodeficiency virus type 1 protein is selected from the group consisting of reverse transcriptase and transactivating protein.

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Please amend claim 5 as follows:

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a<sup>4</sup> 5. (amended) The [vaccine] attenuated bacterial host of claim [4] 1, wherein said attenuated bacterial host is a strain of *Salmonella typhimurium*, SL3261.

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Please amend claim 6 as follows:

Q5 6. (amended) A method of initiating immune responses specific for human immunodeficiency virus type 1 (HIV-1) antigens in an individual in need of such treatment comprising the step of administering said individual with the [vaccine] attenuated bacterial host of claim 1.

Please amend claim 7 as follows:

Q6 7. (amended) The method of claim 6, wherein said human immunodeficiency virus type 1 antigen is selected from the group consisting of reverse transcriptase and transactivating protein.

Please amend claim 9 as follows:

Q7 9. (amended) The method of claim 6, wherein [the live vaccine] said attenuated bacterial host is [administering] administered orally.

Please amend claim 10 as follows:

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10. (amended) The method of claim 6, wherein  
[vaccine] said attenuated bacterial host is administered in an oral  
dose of from about  $10^{12}$  to about  $10^{14}$  CFU (colony forming unit).

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Please add claim 11 as follows:

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11. The attenuated bacterial host of claim 1, wherein  
said immune responses comprises a mucosal IgA response and a  
helper T cell response.

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Please cancel claim 4.

### **REMARKS**

#### **The 35 U.S.C. §112 Rejection**

Claims 1-10 were rejected under 35 U.S.C. §112, first paragraph, for lack of enablement. The rejection is respectfully traversed.

Claims 1-5 are drawn to an attenuated bacterial host comprising a recombinant plasmid containing a gene encoding a